



Recovery Support Strategy

FEMA-4273-DR-WV

Federal Interagency Recovery Coordination

January 2017



US Army Corp
of Engineers

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Executive Summary

This Recovery Support Strategy (RSS) describes the direction that federal agencies and their partners will take to support the gaps in West Virginia's capacity to recover from the disaster event of June 22-29, 2016, focusing on the issues identified in the Mission Scoping Assessment (MSA) report. It will also serve as a federal coordination document for the Recovery Support Function (RSF) agencies and organizations. The RSS identifies 69 strategies that the State, RSF agencies and their partners can take to address the 15 identified recovery issues. The RSS also provides milestones, in the form of measurable objectives, to help track progress and implementation actions which identify critical stakeholders and describe how the RSFs anticipate contributing to the solution of state and local recovery issues or core capability gaps.

An initiative key to the State's recovery and many of the actions described in this RSS is establishing a State Resiliency Office (SRO). The suggestion to create an SRO came about through multiple discussions with State and federal stakeholders including the WV Secretary of Commerce, members of the WV Department of Commerce, the US Economic Development Administration, and the Federal Emergency Management Agency (FEMA). The purpose of the proposed SRO is to oversee and coordinate implementation of long-term recovery efforts, including those recommended by the Community Planning and Capacity Building, Economic Recovery, Housing, and Infrastructure Systems RSFs. Additionally the SRO will look to implement measures that will enhance West Virginia's overall resiliency. While an SRO has not been established as of the final draft of this RSS, the WV Department of Commerce has strongly expressed its desire to create and embed the SRO within the WV government structure and the federal agencies involved with the development of this RSS are committed to supporting the SRO's establishment.

Issues & Strategies Summarized by Recovery Support Function

COMMUNITY PLANNING AND CAPACITY BUILDING

Issue: State Recovery Capacity Strained

Strategies:

- Scope, fund, and stand up the West Virginia SRO
- Determine staffing needs to successfully manage recovery
- Fill the staffing gaps identified in the staff capacity comparison
- Determine any gaps in required skill level and knowledge base
- Implement training and education programs to meet recovery needs

Issue: Local Recovery Capacity Exceeded

Strategies:

- Determine staffing needs to successfully manage recovery
- Fill the staffing gaps identified in the staff capacity comparison
- Determine any gaps in required skill level and knowledge
- Implement training and education programs to meet recovery needs

Issue: Recovery Planning Challenges

Strategies:

- Develop an appropriate state-level recovery plan model that can be adopted and shared with regional and local communities and a process for supporting regional and local communities with recovery planning support
- Develop a mechanism to identify and prioritize communities needing/requesting assistance with comprehensive planning

ECONOMIC RECOVERY

Issue: Insufficient Economic Diversity

Strategies:

- Enable the most severely impacted areas to implement principles in economic diversification
- Develop four sites with at least 50 acres each for development in the flood impacted area by 2020
- Revitalize downtown commercial districts to promote business development and economic diversification
- Expand the current National Dislocated Worker Grants program to include clean-up and minor repairs to impacted homes and businesses
- Expand/establish a paid internship program and paid on-the-job training programs throughout the impacted area
- Identify opportunities to develop new and improve existing tourism attractions, destinations, and businesses in flood-impacted area
- Expand and publicize the state trails plan (walking/biking/hiking/ATV)

- Expand and publicize historic and cultural sites
- Develop mechanisms that allow the state to better encourage development of new entrepreneurs and to develop new skilled workers for the tourism sector
- Establish a West Virginia Tourism Development Center with oversight for hospitality training and to support job placement in the tourism sector
- Expand existing initiatives to diversify the agriculture sector and use them as an opportunity to train and employ displaced workers in flood-impacted areas

Issue: Lack of Internet Connectivity to Support Business and Industry Growth

Strategies:

- Provide West Virginia Broadband Enhancement Council (WVBEC) staff to conduct research and implement initiatives as directed by the council
- Analyze the feasibility of the provision of affordable broadband and secure funds for identified broadband initiatives

Issue: Limited Access to Capital

Strategies:

- Create alternate financing options (bridge loans, grants) following an economic disruption
- Educate community leaders (e.g., economic development authorities, chambers of commerce) on the capital resources available to businesses following a disaster

Issue: Lack of Business Planning and Economic Resiliency

Strategies:

- Promote strategic business planning to include continuity planning and succession planning and offer training and planning tools through engagement of public and private sector partners
- Build a state public-private partnership through development of county-level partnerships
- Identify an existing database or develop a new business database to support business damage assessment and accelerate deployment of assistance to businesses and workers impacted by a disaster
- Establish working group/business recovery team to support business and workforce recovery following an economic disruption
- Identify workforce vulnerabilities that impact business resiliency and post-disaster recovery
- Identify supply chain vulnerabilities of primary industries that impact business resiliency and post-disaster recovery
- Educate community planners and local leaders on the principles of economic resiliency planning
- Explore resources to provide additional staff to manage economic recovery and resiliency

Issue: Infrastructure Capacity Needs Improvement**Strategies:**

- Study each impacted area to assess needs
- Complete infrastructure projects in highest priority areas
- Analyze and upgrade water and sewer capacity in the impacted area
- Enact a code enforcement program
- Establishment and implementation of a program to remove debris (FEMA ineligible) from waterways in the impacted areas

Issue: Support Needed to Create and Sustain Regional Brands**Strategies:**

- Develop policy and procedures to guide local and regional leaders on how to manage media and counter negative publicity
- Establish a dedicated source of funding to execute a tourism communications and branding campaign to counter negative publicity following a disaster

HOUSING**Issue: Increased Financial Burdens on Households after the disaster****Strategies:**

- Educate homeowners on preparedness options
- Develop incentives to encourage mitigation strategies while rebuilding
- Complete all home repairs to disaster-damaged units not involving structural mitigation
- Provide owners of older and historic homes with guidance to mitigate their flood damaged structure
- Address property title issues that prevent eligibility for federal assistance
- Adopt state-wide land development standards, including modern building code requirements for local adoption and enforcement
- Identify issues preventing individual household disaster recovery
- Address issues preventing individual household recovery
- Increase housing opportunities for low-and moderate-income households based on local market demands
- Identify all Housing RSF partner programs that could be modified to be available to disaster survivors and impacted communities
- Identify needed waivers to make federal programs applicable for disaster recovery

Issue: Lack of Habitable and Environmentally Healthy Housing**Strategies:**

- Encourage mold remediation in flood-affected homes
- Identify and abate all destroyed, vacant, and derelict structures within the impacted communities and rural areas
- Encourage private redevelopment of blighted properties
- Encourage private redevelopment of blighted properties

- Incorporate weatherization, energy efficiency, and sustainable design in all recovery reconstruction
- Coordinate with the WV Department of Environmental Protection (WVDEP), US Department of Agriculture (USDA), and EPA regarding the availability of funding to repair or replace all individual private water treatment systems damaged during the June flooding event

Issue: Lack of Resilient Housing Options

Strategies:

- Relocate or elevate all damaged structures, including repetitive and severe loss structures affected by the June 2016 flooding event
- Remove substantial-damaged structures in the floodway
- Coordinate with federal and nonfederal resources to fund and publish a design study specific to small, rural, valley communities
- Support local communities to adopt any relevant aspects from the design study into their recovery strategies
- Define resources to mitigate damaged private water crossings

INFRASTRUCTURE

Issue: Damaged water and wastewater treatment plants lack resiliency for timely recovery

Strategies:

- Develop and implement flood risk adaptive measures, identify sources of funding, obtain permits to construct
- Utilize existing programs and authorities to address environmental infrastructure needs
- Regionalize water and wastewater treatment plants and associated infrastructure

Issue: Lack of broadband access

Strategies:

- Re-evaluate and prioritize the recommendations made by the strategic plan
- Develop and maintain a list of potential funding sources for broadband infrastructure deployment

Issue: Schools in the flood impact area damaged and/or destroyed

Strategies:

- Determine best use of resources and best outcome for the whole community in providing modern facilities in less flood prone areas
- Develop and implement flood risk management measures and identify funding

Background

From June 22-29, 2016, severe storms, flooding, mudslides, and landslides, generated by a slow moving series of storms, brought widespread damage and destruction to West Virginia. Spanning multiple counties, the storms resulted in 23¹ confirmed deaths. Thousands of homes, hundreds of businesses, and significant infrastructure, including five schools, were severely damaged or destroyed.

Governor Earl Ray Tomblin declared a state of emergency on June 23, 2016. On June 24, the governor requested a major disaster declaration which the President approved on June 25. Following a series of amendments, a total of 12 counties were designated for FEMA's Individual Assistance (IA) and Public Assistance (PA) programs, with another six designated for PA only. The declaration also made FEMA Hazard Mitigation Program funding available statewide.

Rural communities, many already losing population and in economic decline, were the hardest hit. Mountainous terrain (in narrow valleys) confines much of the affected areas' residential and commercial development. This geographic constraint places much of the population within floodplains, exacerbating damage from such severe weather events.

In July 2016, the Federal Emergency Management Agency (FEMA) Advance Evaluation Team (AET) deployed to West Virginia to assess the damages from the 2016 severe storms, flooding, landslides, and mudslides. Their report indicated that additional federal support, above and beyond Stafford Act support, was required. This included the appointment of a Federal Disaster Recovery Coordinator (FDRC) to coordinate the recovery efforts and the activation of three RSFs: Community Planning and Capacity Building (CPCB), Economic Recovery, and Housing. FEMA deployed staff from the National Disaster Recovery Support (NDRS) cadre, an External Affairs Advisor and a Mitigation Advisor which, along with the RSF Field Coordinators, constituted the Interagency Recovery Coordination (IRC) group.

To lead the state's recovery the governor named West Virginia National Guard (WVARNG) Gen. James Hoyer as the West Virginia Chief Recovery Officer on July 13. West Virginia Department of Commerce (WVDOC) Secretary Keith Burdette was named the West Virginia State Disaster Recovery Officer (SDRO) at the same time.

In mid-August a MSA, developed by the IRC group, identified impacts of the disaster which helped to determine gaps in the State's capacity to recover.

¹ Confirmed with the Office of the Chief Medical Examiner at the W.Va. Department of Health and Human Resources on January 24, 2017.
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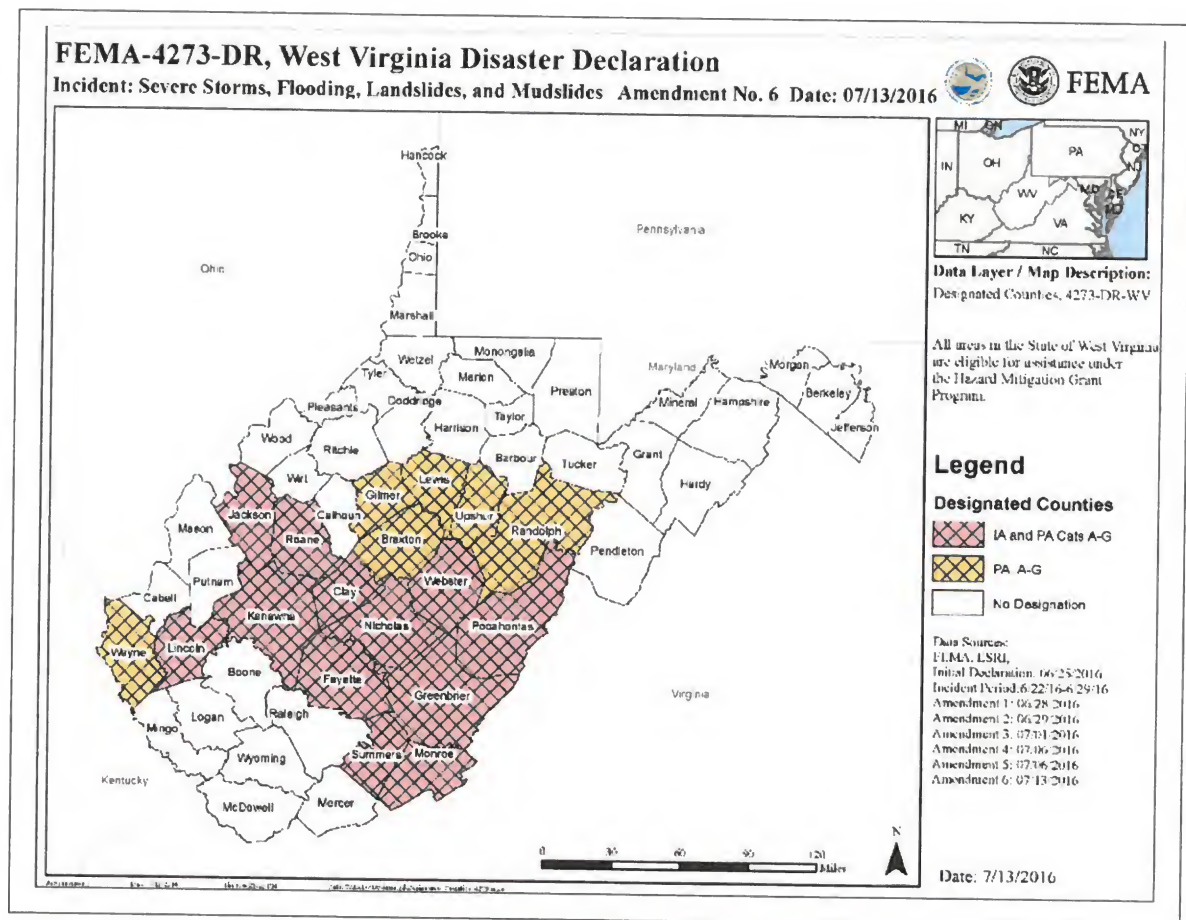


Figure 1: Map of Disaster Declared Counties with an IA or PA designation or both.

The National Disaster Recovery Framework

The National Disaster Recovery Framework (NDRF) is one of five frameworks in the National Preparedness System. Each one of the frameworks describes how the whole community works together for a “secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk”.

Experience has shown that recovery from a disaster takes the organization, coordination, and cooperation of the whole community: local, state, and federal government as well as individuals, families, businesses, and nonprofit organizations. These entities must effectively work together to rebound from the extremely disruptive impacts of large-scale events.

The NDRF provides a structure for federal agencies to work together to support states affected by large scale or catastrophic incidents. The framework brings Federal, Tribal and State experts

together to advise decision-makers on the best methods to achieve an effective recovery. Its flexible structure enables all parties to operate in a unified, collaborative manner and focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community to build a more resilient nation.

It defines the core recovery principles, roles and responsibilities of recovery coordinators and other stakeholders; outlines a coordinating structure that fosters communication and collaboration among all stakeholders; provides guidance for pre- and post-disaster recovery planning; and describes the overall process by which communities can capitalize on opportunities to rebuild stronger, safer, and smarter.

The NDRF provides guidelines for how the FDRC, RSF Field Coordinators, RSF agencies, and partner entities can work together to support recovery efforts in coordination with nongovernmental and private sector organizations including people with disabilities and those who may have access or functional needs. As a result the FDRC and RSF agencies are able to reach across several sectors and promote coordination among stakeholders from the whole community. Each RSF has a coordinating federal agency, primary and supporting agencies, as delineated in the NDRF.

About the Recovery Support Strategy

Experience has shown that communities who develop a plan for recovery often fare better than communities who do not. When a shared vision is agreed upon, objectives and strategies are developed, and collaboration is achieved, the results are stronger and more resilient than those found through an ad hoc process. The strategies outlined in this RSS resulted from an assessment of the conditions following the disaster. Key federal agencies and their State counterparts reviewed data from an extensive list of sources, interviewed local officials, and toured the affected areas. The IRC group then analyzed the data to discover the biggest gaps in the recovery core capabilities.

Included in background research is a detailed analysis of pre-existing demographics of the impacted populations. The University of South Carolina was engaged to provide the team with their methodology for determining Social Vulnerability by community. See the Social Vulnerability Index (SoVI) in Attachment 1. The SoVI information was cross referenced with impacts and recovery solutions.

The RSS serves as an organized way to inform the recovery stakeholders of the type, scope, and nature of RSF recovery support that can be provided to the State and local governments of West Virginia. The strategies and objectives may require further analysis and can be refined as the priorities of the State are further developed. Through dialogue and coordination with RSF partners, RSF Field Coordinators, and IRC: key recovery goals, strategies, and actions are identified on the following pages. The time frames for actions are: a) Short-term, 1-12 months; b) Intermediate, 1-3 years; c) Long-term, 3+years.

Community Planning and Capacity Building

U.S. Department of Homeland Security
Federal Emergency Management Agency



Mission: *to enable local governments to effectively and efficiently carry out community based recovery planning and management in a post disaster environment. CPCB also supports state or territorial governments in developing programs of support for local recovery planning.*

This section of the RSS builds upon the findings and conclusions identified in the MSA and contains specific strategies to address identified impacts and capacity gaps. It summarizes key findings impacting community planning and capacity building in West Virginia and defines recovery issues, goals, objectives, and strategies to support recovery and build resiliency following the devastating effects of the severe storms, flooding, landslides, and mudslides.

After a disaster, communities lack capacity to effectively and efficiently address large complex and unfamiliar challenges. Areas where capacity may be inadequate are administration, human resources, and finance. Capacity may be adequate for day-to-day operations, however, a major disaster strains the resources of the state, local officials, and staff.

The severe storms, flooding, landslides, and mudslides of June 22-29, 2016, severely impacted the 12 counties designated for FEMA's Individual Assistance Program. Many of the affected communities are small municipalities who were already dealing with pre-disaster community and capacity challenges, including declining populations, strained economies, economically vulnerable residents, and significant blight.

Disaster recovery requires local capacity to address complex problems in infrastructure, housing, commerce, community resources, and the natural environment. In the 12 IA designated counties, local capacity to plan, finance, and manage recovery activities varies: some communities require minimal outside support while others face difficult recovery challenges and would benefit from significant assistance. The CPCB RSF supports state, county, local governments, and agencies by collaborating with a broad range of recovery partners in building recovery capacities.

Community Planning and Capacity Building Partner Agencies	
American Planning Association	WV Economic Development Authority
Appalachian Regional Commission	WV Municipal League
County Commissioner's Association of WV	WV National Guard
International Economic Development Council	WV Regional Planning & Development Councils
National Association of Development Organizations	WV State University Research Development Corp.
New River Gorge Regional Development Authority	WVU Extension Service
WV Association of Counties	WVU School of Design & Community Development
WV Chapter of the American Planning Association	WVU Land Use & Sustainable Development Law Clinic
WV Div. of Homeland Security & Emergency Mgmt.	WV Volunteer Organizations Active in Disasters

Table 1: these agencies are in addition to the Federal Partner Agencies listed in Attachment 2

Key Findings

The CPCB RSF identified three sector-specific recovery issues:

State Recovery Capacity Strained

- Limited Institutional Knowledge and Staffing
- Need for Broader Recovery Coordination

Local Recovery Capacity Exceeded

- Limited Staffing, Capabilities, or Capacity
- Limited Access to Resources
- Continued Susceptibility to Flooding

Recovery Planning Challenges

- Lack of Pre- and Post-disaster Recovery Planning
- Lack of Comprehensive Planning

Issue: State Recovery Capacity Strained

Despite the overall resiliency demonstrated by the citizens of West Virginia there are limits to the capacity of the communities and the State to plan, manage, and implement recovery tasks. Although cities and counties in West Virginia may be accustomed to both short-term and long-term planning activities as part of normal government functions, a disaster presents a “new normal,” creating sometimes overwhelming challenges to local or state government staff and the population at large.

Many state-level agencies have limited capabilities which can leave staff overwhelmed with additional workloads created by disaster recovery needs. Additionally, even if state government departments have adequate staff, those staff members may lack the requisite knowledge, skills, and abilities to manage recovery efforts.

The State of West Virginia has very strong preparedness, response, and short-term recovery capabilities, yet lacks an identified state-level agency that is pre-identified to lead recovery

management and resiliency efforts. Without clearly defined recovery roles and responsibilities in disaster recovery, there exists no established recovery structure.

Goal: The State of West Virginia has the capacity to successfully manage and coordinate long-term disaster recovery

Objective: *By July 1, 2017, West Virginia has sufficient staff to develop and successfully manage long-term recovery plans, programs, and projects*

Strategy: Scope, fund, and stand up the West Virginia SRO

Action:

- Develop a 3-5 year scoping and staffing plan for the SRO (Intermediate)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: WV Governor's Office, FEMA
- Secure funding for staff, facility, equipment and operating budget for minimum 3 years
Coordinating Agency: WVDOC (SRO)
Supporting Partners: Appalachian Regional Commission, EDA, FEMA, HUD

Strategy: Determine staffing needs to successfully manage recovery

Action:

- Establish the baseline needs for effective recovery management (Short-Term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: WV Governor's Office, WVDOC, FEMA, WVDOP
- Compare the state's recovery staff capacity to the established baseline (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: WVDOC, WVDOP

Strategy: Fill the staffing gaps identified in the staff capacity comparison

Action:

- Secure funding and hire or cross-train identified staff as needed (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: WVDOP, WVDOC, EDA, Appalachian Regional Commission, FEMA

Objective: *By July 1, 2017, State leadership and staff are sufficiently equipped with the skills and knowledge to create and successfully manage long-term recovery plans, programs, and projects*

Strategy: Determine any gaps in required skill level and knowledge base

Action:

- Determine the peer-accepted baseline of expertise needed at the state level for effective recovery management. (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: FEMA, WVAPA (WV Chapter of the American Planning Association, West Virginia Floodplain Management Association (WVFMA),

West Virginia colleges and universities, National Emergency Management Association (NEMA), Nongovernmental Organizations (NGOs)

Action:

- Perform a recovery expertise comparison to the baseline to determine needs (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: West Virginia Department of Homeland Security and Emergency Management (WVDHSEM), FEMA, West Virginia colleges and universities

Strategy: Implement training and education programs to meet recovery needs

Action:

- Coordinate peer-to-peer mentoring relationships with those from other states who have experienced disasters to share their lessons learned and best practices. (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: FEMA-CPCB, WVAPA, WVFMA, West Virginia colleges and universities, NEMA, NGOs

Action:

- Provide disaster recovery information and learning opportunities to State leadership and recovery partners (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: Neighboring states, NEMA, FEMA-CPCB, FEMA, Emergency Management Institute (EMI), WVDHSEM

Action:

- Foster partnerships among states, including the use of mutual aid agreements, to facilitate resource sharing (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: Neighboring state governments, NEMA, FEMA, WVDHSEM

Action:

- Cultivate a network of pro-bono staff. (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: FEMA-CPCB, FEMA, National APA, West Virginia colleges and universities, NGOs

Issue: Local Recovery Capacity Exceeded

Recovery capacity varies widely across the state. Many communities in West Virginia lack capacity to address recovery issues such as floodplain administration, applying for and managing grants, ensuring code enforcement and compliance, developing and implementing recovery plans, and ensuring the whole of community is represented in the recovery decision making process. Limited staff to manage workload, limited staff experience in managing disaster recovery, and limited funding to support additional staff, training, program, and project costs are recovery challenges at the local level.

Goal: Local communities and counties have resources to successfully execute long-term recovery

Objective: *By December 31, 2017, storm affected communities have sufficient staff resources to develop and successfully manage long-term recovery plans, programs, and projects*

Strategy: **Determine staffing needs to successfully manage recovery**

Action:

- Establish a scalable baseline for staff required by each county or local government (Short-term)

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA-CPCB, FEMA, RPDCs, county governments, WVAPA, West Virginia colleges and universities

Action:

- Compare county/locality recovery staff capacity to the baseline to determine needs (Short-term)

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA, RPDCs, county governments, WVAPA

Strategy: **Fill the staffing gaps identified in the staff capacity comparison**

Action:

- Secure funding and hire needed staff including local disaster recovery managers (Short-term)

Coordinating Agencies: WVDOC (SRO), RPDCs, and/or county/local government

Supporting Partners: EDA, American Red Cross, Appalachian Regional Commission, Corporation for National and Community Service (CNCS), US Department of Agriculture-Rural Development (USDA-RD), WVDOC, WVDHSEM, HUD

Action:

- Ensure that communities have access to floodplain managers (Short-term)

Coordinating Agencies: WVDHSEM, communities, county governments, RPDCs

Supporting Partners: WVDOC (SRO), FEMA-NFIP, WVFMA

Objective: *By December 31, 2017, local leadership and staff are sufficiently equipped with the skills, resources, and knowledge to develop and successfully manage long-term recovery plans, programs, and projects*

Strategy: **Determine any gaps in required skill level and knowledge**

Action:

- Determine the recommended baseline of expertise needed at the local level for recovery (Short-term)

Coordinating Agencies: WVDOC (SRO), RPDCs

Supporting Partners: FEMA-CPCB, FEMA, EDA, Department of Labor (DOL), West Virginia colleges and universities

Action:

- Compare available recovery expertise to the baseline for each community to determine needs (Short-term)

Coordinating Agencies: RPDCs

Supporting Partners: FEMA-CPCB, WVDOC, EDA, DOL, West Virginia colleges and universities

Strategy: Implement training and education programs to meet recovery needs

Action:

- Coordinate peer-to-peer mentoring with leaders from communities that have experienced similar disasters to share lessons learned (Short-term)

Coordinating Agencies: WVDOC (SRO), RPDCs

Supporting Partners: WVDOC, FEMA, FEMA-CPCB, EDA, West Virginia colleges and universities

Action:

- Provide relevant tools, such as information, resource sharing, trainings, workshops, and seminars (Short-term)

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA-CPCB, EDA, WVDOP, West Virginia colleges and universities, EMI

Action:

- Host a Recovery Symposium that will focus on resiliency and build capacity for planning efforts from the local level. A discussion on recovery issues will enable participants to develop a strategic approach to recovery, provide local officials with information about various federal, state, and additional whole community recovery resources, and define future training and technical assistance needs (Short-term)

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA, FEMA-CPCB, EDA, EPA, WVAPA, WVDOP, West Virginia colleges and universities, WVDHSEM, NEMA

Issue: Recovery Planning Challenges

There currently exists limited awareness and prioritization of both pre- and post-disaster recovery planning, and no existing disaster recovery plans in the State of West Virginia. Recovery planning is necessary to ensure adequate tools are available following a disaster and to ensure that the whole community works cohesively to reduce vulnerability to future events. Locally driven disaster recovery planning processes assist communities in making informed decisions about goals, policies, priorities, and projects that will guide overall recovery.

Additionally, the existence and quality of a comprehensive plan is a measure of local capacity to conduct post-disaster recovery planning processes. It illustrates the conviction of a community to

improve itself. A good plan is one that translates ideas into actionable projects, each with a project champion and deadline for implementation.

Inclusive planning efforts involve all populations, including the underserved and those with access and functional needs. Failure to integrate diverse and underserved populations in recovery efforts creates barriers to a full recovery.

Many of the communities identified in the disaster affected area do not have comprehensive community plans. This is noteworthy because planning processes are a conduit to engage with stakeholders to define a shared vision before and a disaster and to help ensure implementation of recovery opportunities.

Goal: state, regional, and local entities have the resources/capacity to incorporate recovery planning and comprehensive planning into their existing planning inventory.

Objective: Within a year of the establishment of the SRO, the State of West Virginia has adopted a Pre-Disaster Recovery Plan and is able to assist, regional, county, and storm-affected partners with the development of successful recovery planning efforts

Strategy: Develop an appropriate state-level recovery plan model that can be adopted and shared with regional and local communities and a process for supporting regional and local communities with recovery planning support

Action:

- Provide state, regional, and local staff with recovery planning guidance, training, resources, and tools (Short-term)
Coordinating Agency: FEMA-CPCB
Supporting Partners: FEMA, WVDOC (SRO), RPDCs, county governments, WVAPA, West Virginia colleges and universities

Action:

- Provide state, regional, and local staff with subject-matter expertise to assist them with the development of recovery plans (Short-term)
Coordinating Agency: WVDOC (SRO)
Supporting Partners: FEMA-CPCB, FEMA, WVDOC, RPDCs, county governments, WVAPA, West Virginia colleges and universities

Objective: Within a year of the establishment of the SRO, the State of West Virginia have developed a network of subject-matter expertise resources to assist counties and local communities with the development of comprehensive plans

Strategy: Develop a mechanism to identify and prioritize communities needing/requesting assistance with comprehensive planning

Action:

- Coordinate the match of planning subject-matter experts to local community planning needs.

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA-CPCB, RPDCs, county governments, WVAPA, West Virginia colleges and universities

Strategy: Develop a network of appropriate partners with subject matter expertise in planning and match them to communities in need

Action:

- Identify and engage appropriate partners with subject-matter expertise to assist storm-affected communities with comprehensive planning

Coordinating Agency: WVDOC (SRO)

Supporting Partners: FEMA, RPDCs, county governments, WVAPA, West Virginia colleges and universities

Potential Resources

AIA (American Institute of Architects)

[Center for Communities by Design](#) serves communities with pro bono design assistance and community-driven planning processes; provides technical assistance and training on process design, public engagement, and other community-based sustainability issues; develops resources for communities, partner organizations, government agencies and others; convenes experts and community members to discuss community design and sustainability

APA

[Shared Prosperity](#) A toolkit that arms cities with new ideas for creating a broad, shared prosperity in America's cities, towns, and regions — is now available online

[Community Planning Assistance Teams](#) tailored specifically to a community's needs. Members offer their time and expertise to people and places where additional resources are needed. This program is supported through donations.

CNCS

[Senior Corps](#) connects today's adults, age 55 and older, with the people and organizations that need them most. We help them become mentors, coaches, or companions to people in need, or contribute their job skills and expertise to community projects and organizations

[AmeriCorps Vista](#) engages more than 75,000 Americans in intensive service each year at nonprofits, schools, public agencies, and community and faith-based groups across the country.

DHHS (Department of Health & Human Services)

[Medical Reserve Corps](#) is a national network of volunteers, organized locally to improve the health and safety of their communities.

EDA

[Planning Program and Local Technical Assistance Program](#), assists eligible recipients in developing economic development plans and studies designed to build capacity and guide the economic prosperity and resiliency of an area or region.

EPA

[Smart Growth: Building Blocks for Sustainable Communities](#) program provides targeted technical assistance to selected communities using a variety of tools that have demonstrated results and widespread application.

[Smart Growth: Implementation Assistance Program](#) provides the assistance through a contractor team – not a grant. Through a multiple-day site visit and a detailed final report, the multidisciplinary teams provide options the community can consider implementing to achieve its goal of encouraging growth that fosters economic progress and environmental protection.

EMI, FEMA

[Independent Study](#) offers self-paced courses designed for people who have emergency management responsibilities and the general public. All are offered free-of-charge to those who qualify for enrollment.

FEMA

[CERT: Community Emergency Response Team](#) educates individuals about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using training learned in the classroom and during exercises, CERT volunteers can assist others in their community following a disaster when professional responders are not immediately available to help. CERT volunteers are also encouraged to support emergency response agencies by taking an active role in emergency preparedness projects.

[CPCB Toolkit](#) compilation of guidance, case studies, tools, and training to assist local communities in managing long-term recovery following a disaster. The materials provided in this toolkit are aimed at providing guidance and resources to help local officials and community leaders to lead, organize, plan for, and manage the complex issues of post-disaster recovery.

IEDC

[Restore Your Economy](#) It is a one-stop shop of disaster preparedness, post-disaster economic recovery, and economic resilience resources, tools, event announcements, as well as opportunities to connect with peers through social media groups

Silver Jackets

[Silver Jackets](#) teams in states across the United States bring together multiple state, federal, and sometimes tribal and local agencies to learn from one another in reducing flood risk and other natural disasters.

Smart Growth America

[Governor's Institute on Community Design](#) offers workshops designed to: provide state leaders with practical, action-oriented strategies to create vibrant, economically competitive communities; highlight the connections between economic development, transportation, land use, housing, energy and the environment; bring together a broad range of decision-makers and create the basis for coordinated action among state agencies; and encourage increased cooperation between state and local governments.

Economic Recovery

U.S. Department of Commerce

Economic Development Administration



Mission: *to integrate the expertise of the Federal government to help local, state, and tribal governments and the private sector sustain and/or rebuild businesses and employment, and develop economic opportunities that result in sustainable and economically resilient communities, after significant natural and manmade disasters.*

This section summarizes key findings and defines recovery issues, goals, objectives, and strategies for the Economic RSF. The Economic RSF has identified primary economic recovery and resiliency issues based on available impact indicators (e.g., Small Business Administration (SBA) loans applications, state grants to small businesses) and anecdotal damage information shared by federal agencies, the West Virginia Department of Commerce, regional planning councils, and other organizations that are directly engaged in business development and business recovery in the 12 counties most heavily impacted by the June 2016 flood.

The Economic RSF held workshops for federal, state, and local partners to identify the obstacles and potential solutions to recovering local economies and the opportunities to integrate resilience measures in recovery initiatives. To develop goals, objectives, strategies, and actions that might assist the state in addressing economic recovery challenges, the Economic RSF held focus group meetings related to the primary identified issues: economic diversification, broadband connectivity, access to capital for small businesses, business and economic resiliency, inadequate infrastructure, and regional branding. The federal partners have demonstrated their commitment to the state and will work closely with flood impacted communities to support recovery and economic resilience initiatives.

Because many of the flooded communities are also facing challenges related to the downturn in the coal industry, federal partners have provided funding and technical assistance to retrain displaced coal workers, rehabilitate aging infrastructure, diversify economies and address other economic challenges. The Economic Development Administration (EDA) is collaborating with local partners on several initiatives including a project to support the creation of a regional loan fund for a Community Development Finance Institution (CDFI). EDA also supports development of the comprehensive economic development strategies (CEDS) produced by the state's 11 RPDCs.

Since the flood, EDA has engaged state economic development officials to explore ways they might assist with the establishment of an SRO. In addition, USDA is currently funding several

infrastructure projects and community facilities in the impacted areas and has been assessing the flood damage to these projects to identify potential additional assistance it might give.

The Appalachian Regional Commission is supporting entrepreneur development and job training programs and other economic recovery projects linked to the Partners for Opportunity and Workforce and Economic Revitalization (POWER) initiative which is a federal program that directly assists communities affected by the decline of the coal industry. Finally, the DOL has invested millions of dollars to support the State's effort to assist workers displaced by the decline of coal production and the summer flood.

Economic Recovery Partner Agencies	
Appalachian Regional Commission	Community Development Financial Institutions
International Economic Development Council	Legal Aid of West Virginia
Local Economic Development Authorities	National Association of Development Organizations
Service Corps of Retired Executives	WV Broadband Enhancement Council
WV Bureau of Public Health	WV Chamber of Commerce
WV Conservation Authority	WV Dept. of Highways
WV Dept. of Environmental Protection	WV Div. of Homeland Security & Emergency Management
WV Division of Tourism	WV Historic Preservation Office
WV Human Resources & Development Foundation	WV Infrastructure Jobs & Development Council
WV Army National Guard	WV Office of GIS Coordination
WV Regional Contraction Assistance Center	WV Regional Planning & Development Councils
WV Small Business Development Centers	West Virginia University Extension Service
WV Volunteer Organizations Active in Disasters	

Table 2: these agencies are in addition to the Federal Partner Agencies listed in Attachment 2

Key Findings

The Economic RSF identified five sector-specific recovery issues:

- Insufficient Economic Diversity
- Lack of Internet Connectivity to Support Business and Industry Growth
- Limited Access to Capital
- Lack of Business Planning and Economic Resiliency
- Opportunity to Improve Infrastructure Capacity
- Support Needed to Create and Sustain Regional Brands

Federal, state, and local partners developed the following goals, objectives, strategies, and actions to address these findings.

Issue: Insufficient Economic Diversity

The 12 counties that were the most heavily impacted by the flood include chronically distressed communities in West Virginia. Many economic challenges, most particularly the downturn in the coal industry, have had a devastating impact on businesses and the workforce throughout the central and southeast regions of the state. The eroding economic conditions have rippled throughout the communities and have threatened the capacity of businesses to rebound and of public institutions to manage overall flood recovery.

Over the last 24 months, the 12 declared counties collectively have a 7.0 percent unemployment rate, which is 1.54 points higher than the national average of 5.46. Two of the counties, Clay and Roane, have reported unemployment rates that are more than double the national average. Per capita income for the 12 counties is \$23,858 or 83.55 percent of the national average. Some of the hardest hit counties reported an even lower per capita income; for instance, Clay County has per capita income of \$16,487 or just 57.7 percent of the national average.

West Virginia has created incentive programs to attract manufacturers and other businesses to locate and remain in rural areas of the state; however, these resources have been strained due to the financial constraints of the State. Before the flood, the State faced a \$250 million budget deficit, and the Legislature appropriated funds from the state's "Rainy Day" account and made numerous spending cuts to balance the 2017 budget.

Communities throughout the impacted regions have traditionally depended on natural resource-based industries, particularly coal, as their primary economic driver and employer. The lack of economic diversification has been problematic, and these communities have been struggling to "reinvent" themselves through the development of new businesses, particularly those in the manufacturing, tourism and agribusiness sectors. Many of the most heavily impacted communities are located primarily in rural regions that are best positioned for developing agribusinesses and tourism opportunities related to the rivers, forests, and other nearby natural resources.

Business recruitment efforts cannot begin to keep up with the loss of jobs due to the downturn in the coal industry. Additional resources must be identified to continue to attract businesses to the impacted areas of the state. Infrastructure and topography constraints inhibit cost effective site development in these regions. These constraints must be addressed before communities can substantially diversify their industry base and become more resilient.

Workforce West Virginia (Workforce WV) has focused resources on retraining dislocated coal industry workers with marketable skills for high-demand jobs. It also plans to use federal funding to hire 250 workers who were displaced due to the flood, to assist with debris removal and other

direct recovery efforts. State workforce officials also want to develop a job training program that would provide displaced workers with construction skills so they might find employment rebuilding homes and businesses that were severely damaged by the June flood.

Tourism is an increasingly important part of the West Virginia economy and one of the most promising industries in diversifying the state's economy. Tourism and related travel contributed \$4.9 billion to the West Virginia economy in 2015 and this growth has been increasing by 5.6 percent per year since 2000. In constant dollars, travel spending has increased by 3.1 percent over the same period.

Growth in tourism will not be realized without attention and investment. Given the changes in demographics, leisure activity participation and visitor expectations, as well as an increasingly competitive environment, the path to growth must be strategic, well-planned, and positioned for success to maximize the state's tourism potential. The overall quality of the visitor experience and of attractions and accommodations is dependent on the ability of the State to secure new investment for marketing, infrastructure, and product development.

Goal: Develop competitive communities through the recruitment of new and expansion of existing business

Objective: *Conduct an analysis of impacted areas to develop economic diversification strategies in 2017*

Strategy: **Enable the most severely impacted areas to implement principles in economic diversification**

Action:

- Develop a comprehensive plan to identify targeted economic diversification and community rebuilding development strategies (Short-term)

Coordinating Agencies: RPDCs, local government

Supporting Partners: WVDOC, Appalachian Regional Commission, EDA, USDA, and foundations

Objective: *Implement development strategies and projects that promote economic diversification by 2020*

Strategy: **Develop four sites with at least 50 acres each for development in the flood impacted area by 2020**

Action:

- Conduct a land development study that includes all fiscal, engineering, and environmental analysis necessary for effective site development including intended use such as mixed use, industrial, and commercial (Intermediate)

Coordinating Agencies: RPDCs

Supporting Partners: WVDOC, Appalachian Regional Commission, EDA

Action:

- Develop a site and building development fund that will allow public bodies to acquire and develop property for commercial and industrial development (Intermediate)
Coordinating Agencies: WVDOC, local Economic Development Authorities (EDAs)
Supporting Partners: Appalachian Regional Commission, EDA, RPDCs, USDA, local Economic Development Authorities, and private foundations

Action:

- Secure funds to acquire and construct sites to be marketed for development based on the needs of the impacted communities (Intermediate)
Coordinating Agencies: RPDCs
Supporting Partners: local governments, EDA, local EDAs, WVDOC, Appalachian Regional Commission, and private investors

Strategy: Revitalize downtown commercial districts to promote business development and economic diversification

Action:

- Access technical services available through West Virginia Main Street Program and other resources to conduct effective revitalization efforts to meet community needs and market community assets (Short-term)
Coordinating Agencies: RPDCs, and local governments
Supporting Partners: West Virginia Main Street program, HUD, and USDA

Objective: Provide at least 250 dislocated workers a broader range of experience while assisting impacted homes and businesses

Strategy: Expand the current National Displaced Worker Grants (DWG) program to include clean-up and minor repairs to impacted homes and businesses

Action:

- Explore the option of procuring funds from a community or corporate foundation to expand the capacity of DWGs program originally funded by the DOL (Short-term)
Coordinating Agencies: Workforce WV
Supporting Partners: DOL, community and corporate foundations, Voluntary Organizations Active in Disasters (VOAD)

Action:

- Collaborate with public and nonprofit organizations to implement a construction job training program for dislocated workers to be trained in construction trades (Intermediate)
Coordinating Agency: Workforce WV
Supporting Partners: Nonprofit organizations, DOL, Appalachian Regional Commission, CNCS, WVDOC, USDA, West Virginia universities and colleges

Objective: Assist local companies with expansion and diversification while providing new jobs for residents by 2018

Strategy: Expand/establish a paid internship program and paid on-the-job training programs throughout the impacted area

Action:

- Procure funds to establish an internship program for recent community college and university graduates (Intermediate)

Coordinating Agency: Workforce WV

Supporting Partners: DOL, WVDOC, Appalachian Regional Commission, US Department of Education (DOEd), and CNCS

Action:

- Increase resources to the Governor's Guaranteed Workforce Development Program to assist companies and displaced workers in the impacted area with a specific emphasis on retooling initiatives (Short-term)

Coordinating Agencies: WVDOC

Supporting Partners: DOL, Appalachian Regional Commission, and DOEd

Goal: Expand tourism base to stimulate economic growth and diversity in impacted areas

Objective: Increase statewide tourism revenue by 25 percent by FY 2020

Strategy: Identify opportunities to develop new and improve existing tourism attractions, destinations, and businesses in flood-impacted area

Action:

- Develop a SWOT (strengths, weaknesses, opportunities, and threats) analysis of the tourism sector in flood impacted communities to identify opportunities to develop new and existing tourism assets (Short-term)

Coordinating Agency: WV Division of Tourism

Supporting Partners: WVDOC, WV Association of Convention & Visitors Bureaus (WVACVBs), local EDAs, and local governments

Strategy: Expand and publicize the state trails plan (walking/biking/hiking/ATV)

Action:

- Conduct a feasibility study to determine most effective methods to expand the network of trails in West Virginia and to promote the interconnection between trails in West Virginia with trails in adjacent states (Intermediate)

Coordinating Agency: WV Division of Tourism

Supporting Partners: WVDOC, WV Department of Highways (WVDOH), Department of Transportation (DOT), WVACVBs, RPDCs, local Economic Development Authorities, local governments, Rails to Trails organizations

Strategy: Expand and publicize historic and cultural sites

Action:

- Survey and prioritize historically and culturally significant communities to target for restoration and develop as tourism destinations (Short-term)

Coordinating Agencies: WV Division of Tourism

Supporting Partners: WVDOC, WV Historic Preservation Office, (WVHPO)

WVACVBs, local EDAs, local governments

Strategy: Develop mechanisms that allow the state to better encourage development of new entrepreneurs and to develop new skilled workers for the tourism sector

Action:

- Hold a kickoff symposium to engage local, state, and federal partners in identifying potential projects, programs and resources that could support the creation of new tourism sector businesses and the training of workers for the tourism sector (Short-term)

Coordinating Agency: WV Division of Tourism

Supporting Partners: US International Trade Administration (ITA), EDA, Environmental Protection Agency, USDA, WVDOC, WVACVBs, USDA, WV Small Business Development Center (SBDC), local EDAs, local governments

Action:

- Explore and identify viable public and private sector funding options to develop an entrepreneurship program to support the growth of West Virginia based tourism businesses (Short-term)

Coordinating Agencies: WV Division of Tourism, WVDOC

Supporting Partners: USDA, Appalachian Regional Commission, SBA, EDA, WVACVBs, RPDCs, local EDAs, local government

Strategy: Establish a West Virginia Tourism Development Center with oversight for hospitality training and to support job placement in the tourism sector

Action:

- Develop training modules that can be delivered onsite and online in coordination with the WV Division of Tourism, Workforce WV, and academic partners (Intermediate)

Coordinating Agencies: WV Division of Tourism, Workforce WV

Supporting Partners: ITA, USDA, ARC, SBA, EDA, WVACVBs, RPDCs, local EDAs, local governments

Action:

- Engage partners to develop a fundraising plan that identifies public and private sector resources to fund the development of the West Virginia Tourism Development Center (Intermediate)

Coordinating Agencies: WV Division of Tourism, Workforce WV

Supporting Partners: ITA, USDA, Appalachian Regional Commission, SBA, EDA, WVACVBs, local EDAs, local governments, nonprofit organizations, community and private foundations

Goal: Expand agriculture industry and support development of new agriculture businesses to spur economic growth and diversity in the impacted area

Objective: *Engage agriculture resources owned by WVARNG and other partners to develop a minimum of two traditional and nontraditional agricultural products and services by 2020*

Strategy: **Expand existing initiatives to diversify the agriculture sector and use them as an opportunity to train and employ displaced workers in the flood impacted area**

Action:

- Develop a strategy to create a cooperative community farming organization to facilitate expansion of the agriculture sector (Intermediate)

Coordinating Agencies: WVARNG, WV Department of Agriculture (WVDA)

Supporting Partners: USDA, Workforce WV, EDA, WVDOC, extension services, RPDCs, local government, industry organizations, academic partners

Action:

- Expand hydroponics and aquaponics research and job training in the impacted area (Intermediate)

Coordinating Agencies: WVARNG and WVDA

Supporting Partners: RPDCs, local government, extension services, Workforce WV, Appalachian Regional Commission, USDA Farm Service Agency (FSA), National Oceanic and Atmospheric Agency (NOAA), EDA, WVDOC, industry organizations

Action:

- Develop aggregation points (e.g., food processing facilities) in the impacted area to facilitate job training, processing, and distribution (Intermediate)

Coordinating Agencies: WVARNG, WVDA

Supporting Partners: RPDCs, local government, state extension services, Workforce WV, Appalachian Regional Commission, USDA, EDA, WVDOC, industry organizations

Action:

- Identify and pursue funding sources to fund the development of public/private agritourism projects and promote the expansion of agritourism projects (Intermediate)

Coordinating Agencies: WV Division of Tourism, WVDA, WVARNG

Supporting Partners: USDA, Appalachian Regional Commission, SBA, EDA, WVDOC, WVACVBs, state extension services, local EDAs, local governments, industry organizations

Issue: Lack of Internet Connectivity to Support Business and Industry Growth

Virtually every business, including home-based businesses, requires access to the internet to serve customers and clients. Therefore, affordable broadband access is an important factor in the region's ability to diversify its economy.

An effective broadband strategy includes a plan to expand broadband-enabled technology and solutions across education, healthcare, and all other key economic sectors. Successful strategies also call for the development of a public-private partnership to design and execute targeted awareness campaigns regarding the benefits of the online interaction for both personal use and small business enterprises, and support the development of strategies to address the affordability challenge and how the service will be made available to schools and other broad-based community users.

The completion of the West Virginia Broadband Strategic Plan in 2014 identified numerous issues and action items to be addressed to increase broadband access in West Virginia. The formation of the Governor's WVBEC in 2016 illustrates the state's commitment to further broadband access and set goals for increasing broadband in the impacted rural areas. The Economic RSF has met with the leaders of the council and plans to assist the council with identifying resources to expand the availability and accessibility of broadband and help communities attract new and grow existing businesses. In addition, the team is working with communities to identify how that expansion can support online education and training opportunities.

The regional broadband strategic plans have clearly demonstrated that there is a need to improve the broadband environment in West Virginia. Public funding support will be required to encourage private providers to make the necessary capital investment. The state will likely need to develop a partnership that engages a combination of public and private investments including public grants and low-interest loans.

Goal: Establish connectivity through the provision of broadband service in the flood impacted area

Objective: *Provide technical assistance and identify financial resources to support the expansion of broadband in the impacted area by 2017*

Strategy: Provide WVBEC staff to conduct research and implement initiatives as directed by the Council

Action:

- Secure funding and hire qualified staff to implement the WVBEC initiatives to improve connectivity in the flood impacted communities (Short-term)

Coordinating Agencies: WVBEC

Supporting Partners: RPDCs, Appalachian Regional Commission, WVDOC, EDA

Objective: *To establish affordable broadband access to the flood impacted communities and to serve 30 percent of the unserved area by 2025*

Strategy: Analyze the feasibility of the provision of affordable broadband and secure funds for identified broadband initiatives

Action:

- Secure funds and conduct a Broadband Master Plan for the flood impacted communities (Intermediate)

Coordinating Agencies: WVBEC, WV Office of GIS Coordination

Supporting Partners: RPDCs, Appalachian Regional Commission, WVDOC, USDA, EDA, National Telecommunication and Information Administration (NTIA)

Action:

- Conduct a public awareness campaign to specifically target businesses in the impacted area (Intermediate)

Coordinating Agencies: WVBEC, WV GIS

Supporting Partners: RPDCs, Appalachian Regional Commission, WVDOC, USDA, EDA, NTIA

Action:

- Secure funds to construct phased “middle mile” broadband service to enable the state to provide affordable “last mile” service to the flood impacted communities (Intermediate)

Coordinating Agencies: WVBEC, WV Office of GIS Coordination (WVGIS)

Supporting Partners: RPDCs, Appalachian Regional Commission, USDA, WVDOC, EDA, NTIA

Action:

- Identify locations and construct two pilot broadband projects (Long-term)

Coordinating Agency: Local governments

Supporting Partners: WVBEC, USDA, WVDOC, Appalachian Regional Commission, EDA, RPDCs

Issue: Limited Access to Capital

Dozens of small businesses, primarily retailers, tourism-related businesses, and service providers were destroyed or damaged, and their owners are still reeling from the effects of the flooding and the loss of assets and revenue associated with the damage. There is a clear correlation between the ability of a business to obtain financing and investment and its ability to recover from a significant disruption. While insurance might cover losses due to flooding and other natural disasters, many businesses do not purchase insurance that can assist with revenue losses.

For disaster losses not covered by insurance or other sources, the primary form of federal financial assistance is a disaster loan from SBA. The SBA offered its disaster loan program to the businesses that were destroyed or severely damaged in the flood-impacted communities in West Virginia: often small businesses opt not to pursue or are denied an SBA loan because they cannot afford to repay the loan or have other challenges such as unpaid taxes that disqualify them from the program.

The state recognized that the capital needs of many affected businesses were not met by the SBA loan program, banks or insurers and it joined with the West Virginia Chamber of Commerce to create a grant program called RISE West Virginia to address critical business needs resulting from the floods. The public-private grant program aids small businesses that were operational before the flooding and which are working to reopen while struggling with existing debt and limited resources. The program is funded by the state and private donors. By mid-October, the

state had awarded more than \$1.2 million to more than 140 businesses.

Although RISE West Virginia provides grants and not loans, local officials have said that a number of businesses have been reluctant to apply for or have been denied the grants because they do not meet application requirements such as the requirement that they be current on all state taxes.

The lessons learned from the recent disaster offers an opportunity to examine all capital needs of local businesses, explore best practices from other communities, and engage local banks and other community partners in new ways to provide more flexible funding options to local businesses. Federal funding sources, such as community development block grants for the disaster recovery, might offer additional opportunities to assist impacted businesses.

Goal: Affected businesses have access to capital to bridge funding gaps after an economic disruption

Objective: *Increase the number of options for businesses to finance their recovery by 2017*

Strategy: **Create alternate financing options (bridge loans, grants) following an economic disruption**

Action:

- Explore potential resources to provide gap financing such as bridge loans and grants (Short-term)

Coordinating Agency: WVDOC

Support Partners: CDFIs, USDA, EDA, community and private foundations

Action:

- Develop a matrix of existing sources of direct gap funding and technical assistance to create new funding sources (Short-term)

Coordinating Agency: WVDOC

Supporting Partners: FDIC, WWSBDC, CDFIs, SBA, Federal Reserve Bank of Richmond, private foundations

Action:

- Develop a business case management system and designate an organization that will serve as the fiscal agent and administrator (Intermediate)

Coordinating Agency: WVDOC

Supporting Partners: WWSBDC, CDFIs, SBA

Action:

- Coordinate with SBDCs to reach out to declined SBA loan applicants and RISE program applicants to assist with overcoming declinations where appropriate (Short-term)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: SBA, local economic developers, RPDCs, chambers of commerce, and other business support organizations

Action:

- Evaluate the performance of the RISE West Virginia grant program and identify areas for improvement (Short-term)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: SBA, local economic developers, RPDCs, chambers of commerce, and other business support organizations

Action:

- Document the fundraising and case management process used to deploy the RISE grants using the documentation to institutionalize a business grant program that would be activated to assist businesses impacted by future disasters (Intermediate)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: SBA, local economic developers, RPDCs, chambers of commerce, and other business support organizations

Strategy: Educate community leaders, such as local EDAs, and chambers of commerce, on the capital resources available to businesses following a disaster

Action:

- Develop “train-the-trainer” workshops for economic development practitioners regarding available capital from federal, state, and private sector resources (Short-term)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: RPDCs, local EDAs, EDA, WWSBDC, CDFIs, FDIC, SBA, USDA, Federal Reserve Bank of Richmond, local bankers, community and private foundations

Action:

- Identify regional locations to deliver the resource workshops, starting with regions impacted by 2016 flood and engage federal, state and private sector partners to develop and deliver the curriculum (Short-term)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: RPDCs, local EDAs, EDA, WWSBDC, CDFIs, FDIC, SBA, USDA, Federal Reserve Bank, local bankers, community and private foundations

Issue: Lack of Business Planning and Economic Resiliency

Small businesses, particularly the “mom and pop” retailers that comprised most businesses in the rural communities most affected by the flood, commonly face challenges related to limited resources and market challenges that are beyond their control. A flood or any major economic disruption can often be the tipping point that puts them out of business.

Economic development stakeholders have observed that many of the small businesses in affected communities did not have business plans, capital savings, flood insurance or other resources needed to manage their recovery from the recent economic downturn prior to the disaster.

Before the flood damaged their facilities, a number of businesses were exploring their options (i.e., closing, scaling back, repurposing, or redefining their business) due to the loss of customers, decreasing workforce, and lack of capital access imposed by the decline of the coal industry and other traditional economic drivers in their regions. The unique challenges presented by the June flood have compounded the many challenges that were already threatening the economic viability of many of the impacted communities. Community leaders are focused on how to encourage entrepreneurship to assist small business owners with business planning and business development.

Leaders are also exploring ways to incorporate resilience in their economic development strategies and to integrate resilience in their business recruitment and retention programs. For example, a local economic development organization might conduct a vulnerability analysis of an industry sector it has identified for potential recruitment. That analysis might reveal supply chain or other vulnerabilities that indicate it is not a viable target and should not be included in the community's business recruitment strategy. The Economic RSF has engaged with local leaders and will share best practices from communities struggling with similar challenges and assist leaders to integrate resiliency principles in economic and workforce development initiatives.

Goal: Increase the number of businesses with business and continuity plans accelerating recovery in a post disaster environment

Objective: *Expand the number of businesses that have updated, functional business, and continuity plans by 5 percent by the end of 2018*

Strategy: **Promote strategic business planning to include continuity planning and succession planning and offer training and planning tools through engagement of public and private sector partners**

Action:

- Conduct survey to establish baseline understanding of business and continuity planning needs (Short-term)

Coordinating Agencies: WVDOC, WWSBDC

Supporting Partners: Chambers of commerce, industry associations

Action:

- Update the resources and business preparedness section of the WVDHSEM website (Short-term)

Coordinating Agencies: WVDHSEM

Supporting Partners: WVDOC, WWSBDC

Action:

- Distribute business continuity toolkit to businesses (Short-term)

Coordinating Agency: WWSBDC

Supporting Partners: WVDOC, Service Corps of Retired Executives (SCORE), chambers of commerce, industry organizations

Action:

- Secure public/private sector funding to reinstate the “continuity coordinator” position and add business coaches with the WWSBDC (Intermediate)

Coordinating Agency: WWSBDC

Supporting Partners: SBA, WVDOC, EDA, private foundations

Action:

- Develop a business planning/financial literacy program that could be delivered to businesses on site or online employing tools such as “Money Smart for Small Businesses” developed by the FDIC and SBA (Intermediate)

Coordinating Agency: WWSBDC

Supporting Partners: FDIC, SBA, WVDOC, local economic developers, chambers of commerce, industry organizations

Action:

- Develop a pilot program to establish “one-stop” business support centers in RPDC Region 3 and Region 4 that could provide technical assistance related to business and continuity planning, procurement and contracting, capital access, legal issues, etc. (Intermediate)

Coordinating Agency: WWSBDC

Supporting Partners: SBA, DOC, WVDOC, Legal Aid of WV, Regional Contracting Assistance Center, Procurement Technical Assistance Center (PTAC), SCORE, RPDCs, local economic developers, chambers of commerce, industry organizations

Goal: Develop a system to quickly access and address the damage to businesses to minimize the economic impact to affected communities

Objective: Develop a statewide, bottom-up approach that engages local leadership in developing economic resiliency initiatives

Strategy: Build a state public-private partnership (PPP) through development of county-level partnerships

Action:

- Host a PPP kickoff summit to promote collaboration and launch economic resiliency initiatives (Intermediate)

Coordinating Agencies: WVDOC, WVDHSEM

Supporting Partners: WWSBDC, industry organizations, local EDAs, emergency managers, chambers of commerce, EDA, USDA, private foundations, county planners, and other leaders

Action:

- Engage economic development, workforce and private sector partners in all disaster phases and emergency management exercises that are designed to determine state readiness for potential disasters (Intermediate)

Coordinating Agencies: WVDOC and WVDHSEM

Supporting Partners: RPDCs, local EDAs, chambers of commerce, industry organizations

Objective: *Develop a consistent system to identify and address needs of businesses that sustained direct and indirect impacts in any disaster by 2018*

Strategy: **Identify an existing database or develop a new business database to support business damage assessment and accelerate deployment of assistance to businesses and workers impacted by a disaster**

Action:

- Employ a business database that is accessible to local economic developers, workforce organizations and other partner organizations to conduct outreach to local businesses, assess business needs, and determine economic damage to their communities (Long-term)

Coordinating Agencies: WVDOC, Workforce WV

Supporting Partners: Regional workforce boards, chambers of commerce, RPDCs, chambers of commerce, industry organizations

Strategy: **Establish working group/business recovery team to support business and workforce recovery following an economic disruption**

Action:

- Identify and engage organizations that have a mission and tools to conduct business needs assessments, identify and deploy resources and conduct economic analysis (Intermediate)

Coordinating Agencies: WVDOC, WVDHSE

Supporting Partners: EDA, Appalachian Regional Commission, DOL, local EDAs, RPDCs, chambers of commerce, industry organizations, local emergency managers, WWSBDC

Goal: Establish a thorough understanding of assets and vulnerabilities of local and regional economies

Objective: *Improve resiliency of the workforce that is essential to economic recovery and resiliency*

Strategy: **Identify workforce vulnerabilities that impact business resiliency and post-disaster recovery**

Action:

- Conduct a workforce analysis that includes displaced coal industry workers to identify workforce vulnerabilities and resources to address those vulnerabilities (Intermediate)

Coordinating Agencies: Workforce WV

Supporting Partners: WVDOC, DOL, EDA, USDA, local economic industry organizations

Objective: *Improve resiliency of the supply chains that are essential to economic recovery and resiliency*

Strategy: **Identify supply chain vulnerabilities of primary industries that impact business resiliency and post-disaster recovery**

Action:

- Conduct a supply chain analysis that includes existing and potential economic driver industries to identify supply chain vulnerabilities and identify strategies to address those vulnerabilities (Long-term)

Coordinating Agencies: WVDOC

Supporting Partners: RPDCs, industry organizations, EDA, USDA, local EDAs

Goal: Integrate economic resiliency in all community planning

Objective: *Enhance economic resiliency concepts and performance measures in each of the 11 regional comprehensive economic development strategies by 2018*

Strategy: Educate community planners and local leaders on the principles of economic resiliency planning

Action:

- Conduct economic resiliency training with local leaders, such as, economic developers, emergency management directors, and community planners (Short-term)

Coordinating Agencies: WVDOC, RPDCs

Supporting Partners: EDA, USDA, WVDHSEM, IEDC, the National Association of Development Organizations (NADO), EPA

Action:

- Organize and conduct grant workshops for state, regional and local leaders (Short-term)

Coordinating Agency: WVDOC

Supporting Partners: EDA, RPDCs, WVDHSEM, IEDC, NADO

Objective: *Increase the staffing capacity of regional groups to manage economic recovery and integrate resiliency measures in their regions by 2017*

Strategy: Explore resources to provide additional staff to manage economic recovery and resiliency

Action:

- Apply for funding to hire staff to develop and manage regional economic recovery and resiliency managers (Short-term)

Coordinating Agency: WVDOC,

Partner Agencies: EDA, RPDCs, Appalachian Regional Commission

Action:

- Hire regional economic recovery and resiliency managers to develop and manage plans and programs (Short-term)

Coordinating Agency: WVDOC

Supporting Partners: EDA, RPDCs, Appalachian Regional Commission

Issue: Infrastructure Capacity Needs Improvement

Long before the June flood, many of the impacted communities had been struggling with challenges posed by inadequate and deteriorating infrastructure. For example, only an estimated

35 percent of the residents in Clay County have potable water and 10 percent have sanitary sewer service. In Kanawha County, 95 percent of the residents have potable water service and 70 percent have sanitary sewer service, but many of the existing systems are aged, deteriorated, and in need of rehabilitation or replacement and relocation. Some of the systems have simply outlived their expected lifespan. For example, the Richwood waste-water treatment plant was constructed in the 1960s and needs to be upgraded or replaced.

Many of these communities have limited ability to obtain loans or provide the local matching funds required by federal infrastructure assistance programs. The local financial limitations stem from several economic realities including a shrinking customer base and an inability to increase water and sewer rates due to their customer's inability to pay. There is a severe capacity issue in many of these communities which lack the necessary staff to operate and maintain their systems. Communities should explore creating regional utility authorities and other options that could better support the maintenance of local water systems.

Site development specific to businesses and commercial facilities is also impeded by the abandoned buildings in many of the communities. Only one impacted county and one impacted municipality have a building commission and code enforcement program. The lack of building codes and building commissions in most counties makes removal of these abandoned buildings extremely difficult. There are resources available to assist communities with this process including the WVU Leap toolkit located at <http://wvleap.wvu.edu/>.

Debris removal remains a problem in the flood impacted area. Identifying funding resources to support removal of debris piles not eligible for FEMA assistance is problematic for these small local governments with limited resources to dedicate to this problem.

Goal: Provide underserved areas with access to water and sewer service

Objective: *Extend potable water service and sewer service to 50 percent of the underserved areas by 2025*

Strategy: **Study each impacted area to assess needs**

Action:

- Conduct a county-wide study for those identified as the highest priority for public water service (Intermediate)

Coordinating Agencies: RPDCs, local governments

Supporting Partners: USDA, WV Infrastructure and Jobs Development Council (WVIJDC), West Virginia Bureau of Public Health (WVBPH), WVDOC, Appalachian Regional Commission, EDA, USACE

Strategy: **Complete infrastructure projects in highest priority areas**

Action:

- Prioritize projects, obtain funding and construct/extend potable water service to underserved areas (Intermediate)